

Stevie Wonder Is the Democratic South's New Ambassador
Stevie Wonder has been touring the Americas, Asia and Europe to denounce the system of racial segregation in the United States. The singer was born in the U.S. and spent his youth in the South. He has performed in New York, Paris, London, Zurich, Hong Kong, Singapore, The Hague and Marseille.

WEATHER DATA APPEAR ON PAGE 16

No. 31,793

INTERNATIONAL Herald Tribune

Published With The New York Times and The Washington Post

ZURICH, THURSDAY, MAY 16, 1985

ESTABLISHED 1887

Reagan Approves 'Populist' Tax Plan; Hard Campaign Set

By David Hoffman and Anne Swanson
Washington Post Service

WASHINGTON — President Ronald Reagan has accepted a far-reaching tax-simplification proposal and will begin a campaign for it Monday with a televised address emphasizing its "populist" aspects; administration officials said.

Mr. Reagan approved most aspects of the plan at a White House

said, would help Mr. Reagan emphasize the "populism" theme because it represents an added tax cut for millions of Americans.

Officials said Mr. Reagan would try to sell the proposal as both a break for average taxpayers and as a heavier burden for wealthy Americans and corporations that have paid little or no taxes in the past.

But this effort may run into criticism because the president also has decided to restore a number of tax breaks for investors in the oil and gas industry. These tax breaks were curtailed in the Treasury Department's initial tax-simplification proposal, released last year.

In an effort to give the proposal some political momentum, an administration source said, the president is planning to "get out and really sell it fast" almost every day next week by focusing attention on the benefits for families and for average taxpayers.

Officials said the proposed three-tier individual income tax structure would call for a rate of 15 percent for low incomes, 25 percent for middle incomes and a top bracket of 34 or 35 percent.

They said there was discussion of bringing the top bracket down further, possibly to as low as 30 percent, or of adding a fourth bracket at 30 percent, but those ideas were set aside.

The proposal is expected to include a minimum tax for corporations. Sources confirmed that the administration has decided to permit gifts donated to charity, including stock, to be deducted at their market value rather than at their original price plus inflation. Universities had complained that the latter approach would drastically reduce their revenues.

Officials had discussed raising the personal exemption from \$1,040 this year to \$1,800. The decision to make it \$2,000, officials

(Continued on Page 2, Col. 3)



Aidan Walsh

Armed Men Kidnap a Top UN Official In Beirut

Reuters

BEIRUT — Armed men kidnapped a senior United Nations official in Moslem West Beirut on Wednesday, bundling him into a car after smashing the windshield of his UN vehicle and holding a gun to his driver's head.

Aidan Walsh, 46, deputy director for the United Nations Relief and Works Agency, which assists Palestinian refugees in the Middle East, was seized on a seafloor boulevard while going to work, officials said.

The president can use tax simplification to "wash away some of the bad taste of the budget" fight, as well as the controversy over the personal gifts donated to charity, including stock, to be deducted at their market value rather than at their original price plus inflation. Universities had complained that the latter approach would drastically reduce their revenues.

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(Continued on Page 2, Col. 3)

Toll at 8 In Siege Of MOVE

Mayor Defends Action of Police In Philadelphia

The Associated Press

PHILADELPHIA — The police reported Wednesday that they had found eight bodies in the charred ruins of the house formerly occupied by the radical back-to-nature group MOVE.

The house was destroyed after the police bombed it in an attempt to gain entry, and about 60 neighboring dwellings also were burned.

On Tuesday, Mayor W. Wilson Goode defended the decision by the police to drop a bomb on the house as appropriate, although the action "did not turn out as intended." The city's police commissioner said Wednesday that officials believe the group had a hand in starting the fire.

All or parts of six charred bodies, two of them the remains of children, were removed Tuesday from the house. Clarence Mosley, the city's assistant managing director, said that one of the two bodies found Wednesday also was that of a child.

Some reports had said as many as 12 adults and 10 children had been barricaded in the house before the police tried to clear them out. Other reports said that MOVE members had dug a labyrinth of tunnels from the basement, and the police were looking for signs of escape routes.

Mr. Goode, who denounced MOVE as a group "dedicated to the destruction of our way of life," said at a press conference that he accepted responsibility for the "accidental and unexpected" fire. "But it was the right decision," he said.

He promised the estimated 225 neighborhood residents who were displaced by the fire that the city would pay to rebuild their houses. About 60 houses were destroyed, more than in any other fire in the history of the fifth-largest U.S. city. Damage is estimated at least \$5 million.

Police Commissioner Gregore Sambor, interviewed Wednesday on a television news program, said, "We did not create any fire."

The fire did start inside the house," said Mr. Sambor, who ordered the bomb dropped. He said that the police had tested the bomb on similar structures made of wood and tar paper without starting any fires.

The police said that nine persons were killed and 22 were wounded in sectarian battles that raged along Beirut's Green Line, in the 18th straight day of clashes on the line dividing the city's Christian and Moslem sectors. The Associated Press reported.

Mr. Walsh has been in Beirut since September. His wife and three children live in Dublin.

He was seized nearly two months after a British journalist, Alec Collett, who was on assignment as an information consultant in Beirut for the agency, was kidnapped south of Beirut on March 25.

The government scientists and others familiar with the top-secret research said Tuesday that the advance has increased the brightness and thus the power of the X-ray device by focusing its rays.

Major critics of a space-based missile defense system, which is strongly supported by President Ronald Reagan, have been briefed on the advance.

In recent months, Reagan administration officials have tended to play down the X-ray laser's importance in the five-year, \$26 billion research project on space weapons, emphasizing instead the use of nonmilitary devices to destroy enemy missiles in space. For example, these devices might hurl nonexplosive projectiles to destroy targets through their speed and impact.

According to government scientists, a method of focusing the rays was tested in Nevada in an underground explosion. The test occurred March 23, the second anniversary of Mr. Reagan's speech proposing a space shield to render nuclear weapons "impotent and obsolete."



Mayor W. Wilson Goode, right, defended in a television broadcast the decision by the Philadelphia police to bomb the headquarters of the back-to-nature group MOVE. A resident of the neighborhood that burned in the ensuing fire, Leslie Garner, above, wore a shirt supporting the group. One of the co-founders of move, John Africa, above right, was acquitted in 1978 of federal charges following a confrontation in which a Philadelphia police officer was killed.



U.S. Seeking Inspection Of Israeli Nuclear Sites

By John M. Goshko
Washington Post Service

WASHINGTON — The United States has asked to inspect secret nuclear installations in Israel to verify that American-made timing devices, allegedly obtained by unscrupulous means, have not been used in making atomic weapons or re-exported to other countries, U.S. and diplomatic sources report.

The devices, tiny switches known as krytrons, provide the precise timing necessary for nuclear explosions. They are also used in oil-exploration equipment and medical equipment.

According to the sources, Israel has not replied to the formal requests for inspection made by the State Department. They added that the situation had potentially sensitive implications for U.S.-Israel relations because the Israeli government was aware that U.S. policy forbids overseas sales of krytrons unless they are subjected to strict, case-by-case review and licensed by the State Department.

If Israel is unwilling to permit such inspections, the United States wants Israeli officials to come up with an alternative means of accounting for an estimated 500 to 600 devices.

Washington has also called on Israel to return unused devices still in its possession, because they were never licensed for export, the sources said.

It became known this week that a federal grand jury in Los Angeles was investigating whether the devices were smuggled out of the country in violation of U.S. law.

(Continued on Page 2, Col. 6)

Under the Atomic Energy Act and the Export Administration Act, violators could be liable to a 20-year prison term if it were proven that the devices had been exported for the national security advantage of a foreign country.

The police said that nine persons were killed and 22 were wounded in sectarian battles that raged along Beirut's Green Line, in the 18th straight day of clashes on the line dividing the city's Christian and Moslem sectors. The Associated Press reported.

Israel's refusal to submit to international controls and inspection has also meant that, despite its close ties to the United States, it is barred by U.S. nuclear proliferation rules from obtaining devices such as krytrons that could be used in developing nuclear weapons.

The Israeli Defense Ministry, acting Sunday to news of the grand jury investigation, admitted that it had obtained a number of krytrons between 1979 and 1983 and still had a large stockpile. The ministry said the devices had been used only in conventional equipment for research and development and testing and that none had been sent to other countries.

A Pakistani citizen, Nazim Ahmed Vaid, was arrested in June in Houston on charges that he had tried to obtain 50 krytrons and smuggle them out of the country.

The Pakistani government denied that his actions were connected to its reported atomic bomb program. Mr. Vaid, after being allowed to

(Continued on Page 2, Col. 6)

U.S. Progresses With Laser Weapon

By William J. Broad
New York Times Service

NEW YORK — Scientists at the Lawrence Livermore National Laboratory in California have made what appears to be an important advance in developing an X-ray laser space weapon powered by a nuclear bomb, U.S. scientists say.

The government scientists and others familiar with the top-secret research said Tuesday that the advance has increased the brightness and thus the power of the X-ray device by focusing its rays.

Major critics of a space-based missile defense system, which is strongly supported by President Ronald Reagan, have been briefed on the advance.

In recent months, Reagan administration officials have tended to play down the X-ray laser's importance in the five-year, \$26 billion research project on space weapons, emphasizing instead the use of nonmilitary devices to destroy enemy missiles in space. For example, these devices might hurl nonexplosive projectiles to destroy targets through their speed and impact.

According to government scientists, a method of focusing the rays was tested in Nevada in an underground explosion. The test occurred March 23, the second anniversary of Mr. Reagan's speech proposing a space shield to render nuclear weapons "impotent and obsolete."

To the best of our knowledge, the MOVE members had spread flammable material in their compound and in neighboring areas,"

he said, in explaining why the fire spread so quickly.

MOVE members had said they were "prepared to die," he said.

Mr. Sambor said the rubble at the MOVE house was being excavated by a five-story crane. The house, he said, was "the most heavily fortified of any building I have ever seen in 25 years of police work."

"The inside of the home was fortified with trees," he said. "Trees

trunks with the bark still on, and through which firebreaks were cut so they could shoot outside."

The police surrounded the MOVE rowhouse in a new, working-class neighborhood Sunday night and evacuated 200 homes.

When they tried to evict MOVE members Monday on charges including possession of explosives and harassment of neighbors, a gun battle ensued.

Policemen in a helicopter dropped a bomb on the house Monday night to destroy a rooftop bunker and then the fire started. Shots from inside the house pre-

vented firefighters from controlling the blaze.

Two MOVE members escaped their fortress with minor burns.

9-year-old Birdie Africa and Ramona Africa, who had been sought by the police on various charges and is being held on \$3 million bail.

MOVE follows a philosophy espoused by its founder, Vincent Leaphart, who later took the name John Africa. Its members, who use the surname Africa, avoided contact with bureaucracy, ate mostly uncooked food and welcomed visitors in their home as part of their back-to-nature outlook.

Shultz Says Nothing Set On Summit

The Associated Press

VIENNA — Secretary of State George P. Shultz said Wednesday that in talks Tuesday with the Soviet Foreign Minister, Andrei A. Gromyko, the superpowers had not set a time or place for a U.S.-Soviet summit meeting.

Mr. Shultz then left for Washington, declining to say whether the proposed meeting had been discussed during the six-hour session at the Soviet Embassy.

He had said previously on Australian television, "We have not been able to settle on when or where that meeting will take place."

Mr. Shultz said that both sides obviously were interested in an exchange of views between President Ronald Reagan and the Soviet leader, Mikhail S. Gorbachev, but, "We just have nothing to add to what is already known."

Mr. Reagan has invited Mr. Gorbachev to Washington, but the Russians apparently are more interested in meeting in New York in September when world leaders are attending the opening of the UN General Assembly.

Austria Marks Independence

Austria marked 30 years of post-war independence Wednesday as governments from East and West praised its neutrality. Reuters reported from Vienna.

Mr. Shultz and Mr. Gromyko both said in speeches that the negotiations that led to the treaty showed that, given the will, talks could bring solutions to problems.

The former Austrian chancellor, Bruno Kreisky, a leading member of Austrian negotiating teams 30 years ago, said that the Austrian treaty laid the foundations of democracy. "I express the wish that we return to this policy," he said.

The treaty was signed May 15, 1955, after 10 years of negotiations. It led to the withdrawal of occupying troops from the United States, the Soviet Union, Britain and France. Shortly afterward Austria declared itself permanently neutral.

INSIDE

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Democrats' budget plan would freeze funds for military, not Social Security. Page 3.

SCIENCE

A computerized eye-monitoring system may give voice to people who otherwise could not speak. Page 6.

BUSINESS/FINANCE

A key shareholder in Daimler Gmbh has accepted a plan to sell a stake in the company to Daimler-Benz AG. Page 11.

SPECIAL REPORT

Lower oil income in the United Arab Emirates has hurt political consensus. Page 7.

TOMORROW

The alternative press in the United States is seeking an older, more affluent readership.



The Associated Press

Romanian Policy of U.S. Is Assailed

Envoy Resigns, Says Washington Ignores Rights Violations

By Bradley Graham
Washington Post Service

MUNICH — After three and a half years of trying to persuade officials in Washington to toughen their approach to Romania, David B. Funderburk has resigned as the U.S. ambassador to Bucharest and decided to publicize a policy dispute with senior administration officials.

Mr. Funderburk contends that U.S. policy toward Romania is largely misconceived and ineffective.

Mr. Funderburk, in an interview Monday, called for a revision of U.S. policy and a possible end to the "most-favored-nation" trading status and other concessions Washington regularly grants the Bucharest government.</p

Soviet Raids in Pakistan Viewed as Bid to Deter Aid for Afghan Rebels

By Steven R. Weisman
New York Times Service

ISLAMABAD, Pakistan — The Soviet Union has stepped up air and artillery attacks inside Pakistan in recent months in what Pakistani officials say is an attempt to undermine support here for Afghan rebels.

The officials said Monday that their latest figures showed a doubling in the rate of attacks by Soviet planes along the northwestern border. They said there had been 33 violations of Pakistani airspace since the beginning of the year, compared with 33 such violations in all of 1984.

The increased activity has stirred new concerns among American and Pakistani policy-makers that the attacks could generate resentment and fear among Pakistanis over the toll being taken by the fighting in Afghanistan.

"The air incursions are important," a U.S. official said, "because if they keep continuing, they could create a public perception that Pakistan is somehow helpless in the face of them. They have a bad psychological effect, and they give ammunition to the opponents of Pakistan's policies."

Indeed, the attacks appear to have been a factor in what some call a growing tendency by critics of President Mohammad Zia ul-Haq to question the government's strong support of the Afghan rebels. Three million Afghans — one-fifth of the population — have fled into Pakistan since 1979.

In interviews, Pakistani and American officials expressed full confidence that public support for the Afghan rebels would not diminish. They predicted, however, that there will be a debate over the wisdom of that support when the Pakistani National Assembly convenes next month.

Such a debate would be likely to

force General Zia's government for the first time to mount a vigorous defense of his policies and answer his critics in a public forum.

A senior Pakistani official said that after meeting in Moscow in March with the Soviet leader, Mikhail S. Gorbachev, General Zia concluded that the Russians were growing "impatient" with the stalemate in Afghanistan.

This official said that Mr. Gorba



GANDHI HOLDS FIRM — Despite the urging of Sikh leaders in New Delhi, left, and some members of Parliament, Prime Minister Rajiv Gandhi of India, center, persisted Wednesday in his plan to visit the United States. Concerns about Mr. Gandhi's safety stem from the FBI's charge of a plot to kill him.

Egyptians, Israelis Seek To Clear Way to Summit

The Associated Press

CAIRO — Israeli and Egyptian negotiators held talks Wednesday to resolve issues that have clouded their relations and have blocked a proposed summit meeting between President Hosni Mubarak and Prime Minister Shimon Peres of Israel.

If the talks succeed, sources close to Mr. Mubarak said, such a meeting can be held by July.

Campaign Set For Tax Plan

(Continued from Page 1)

York, and Senator Robert W. Kasten Jr., Republican of Wisconsin, author of a major tax-simplification proposal in Congress, have urged the White House to bring the top rate below 30 percent.

Officials said this idea was discarded Tuesday because the revenue loss could not be easily offset elsewhere in the plan. Mr. Reagan has pledged that the plan will be revenue-neutral, meaning that it will bring in approximately the same revenues as existing tax laws.

White House officials said they did not expect congressional advocates of tax simplification to embrace the new plan immediately. They said they hoped it would be seen as a "framework" for producing legislation in the next few months.

Egyptian and Israeli diplomats

said the talks, held under heavy security in a hotel in Gaza on the outskirts of the capital, would cover several issues.

The most crucial topic for Egypt is settling the status of Taba, a 250-acre (100-hectare) beach tract overlooking the Gulf of Aqaba at the southern end of the border between the two countries.

Israel retained control of Taba

when its soldiers withdrew from the Sinai Peninsula in April 1982 under terms of a 1979 peace treaty. Egypt wants Taba's status settled by arbitration, but Israel wants to try mediation first.

A four-member U.S. team attended the afternoon session of the talks. U.S. Embassy sources said the Americans were participating as observers only in talks concerning the border dispute and would not be on hand for other talks.

Relations between Israel and Egypt soured after the Israeli invasion of Lebanon in June 1982. Mr. Mubarak recalled his ambassador to protest the invasion and a massacre of Palestinian refugees by Lebanese Christian militia who supported Israel.

Meanwhile, riot police used truncheons to rout hundreds of protesters outside Cairo's main synagogue. The protest appeared related to reports that a ceremony commemorating the 1948 founding of Israel was planned inside the synagogue. The Israeli Embassy denied that a ceremony was planned.

Mr. Wiesenthal said he believed

the visit has been criticized by the main West German opposition party, the Social Democrats, and President Richard von Weizsäcker, who was on a temporary travel application issued in Genoa, Italy, to a Helmut Gregor and recently found in the archives of the Geneva-based International Red Cross.

The newspaper did not identify its sources for the article, which said Dr. Mengel's right thumbprint was on the document.

In Geneva, a Red Cross spokeswoman confirmed that copies of the document, which is a temporary travel application issued in Genoa, Italy, to a Helmut Gregor and recently found in the archives of the Geneva-based International Red Cross.

The announcement said Mr. Huang was paroled by an unidentified judge of the Beijing Intermediate People's Court. It did not disclose Mr. Huang's present whereabouts or explain whether he would be allowed to leave the country.

Check Sought Of Israeli Sites

(Continued from Page 1)

pled guilty to a reduced charge, was deported.

Sources familiar with the Los

Angels investigation said it centered on an Israeli businessman, Arnon Milchan, who allegedly worked with a Los Angeles company, Milco International, to obtain the krytron from their American manufacturer, EG&G Inc., a high-technology company in Wellesley, Massachusetts, and transfer them to Israel.

Jack Donohue, an attorney for EG&G, said Tuesday that "we sold a number of these items" to Milco and that "as far as we knew, the purchaser indicated they were for domestic use and there was no intention to export them."

One source said, however, that "it's clear on the face of things that the Israeli Defense Ministry knew that it was receiving restricted goods without having followed the prescribed rules."

"What remains to be seen," the source said, "is whether the administration or Congress will make a major issue out of this incident when it's dealing with Israeli aid or whether the matter will be soft-pedaled in exchange for an Israeli act of contrition."

Israel is the largest recipient of U.S. foreign aid. The administration has proposed aid levels for fiscal 1986 of \$1.8 billion in military assistance and \$1.2 billion in economic aid, as well as emergency economic assistance of \$1.5 billion to be spread over two years.

The seasonally adjusted annual sales rate for the U.S. industry in the May 1-10 period was \$1.1 million, which is healthy but below the recent strong trend.

Some economists interpreted the April retail sales increase and an upward revision in the March data as signs that consumer spending is regaining lost momentum and will

help to boost overall economic growth in coming months.

"Retail sales in April are very supportive of the view that we will have a rebound in growth in the second quarter," said Allen Sinai, chief economist for Shearson Lehman Brothers.

He forecast growth from April through June of around 3.5 percent. This would be substantially stronger than the January-March rate of 1.3 percent.

Other economic developments Tuesday included a government report that Americans took on \$1.34 billion more in installment debt than they paid off in March.

The March increase was 7.7 percent below the \$9.04 billion advance registered in February, according to the report by the Federal Reserve Board. The February increase originally had been reported as \$10.37 billion.

Separately, the Labor Department reported Tuesday that jobless rates in 34 states and the District of Columbia in March were below those of a year earlier, but seven states still were experiencing double-digit unemployment.

WORLD BRIEFS

Italian Communists Set Back in Cities

ROME (UPI) — Communists are expected to be shut out of office in all but two of Italy's nine biggest cities as a result of defeats in local elections last weekend, political commentators said Wednesday.

Bologna and Florence are the only cities among the nine where the Communists have the strength to take control of the city councils in alliance with other leftist parties. The Communists, Italy's second-largest party, formerly controlled six of the nine cities.

In the remaining seven cities — Rome, Milan, Turin, Genoa, Venice, Bari and Palermo — the five parties that form the coalition headed by Prime Minister Bettino Craxi, a Socialist, have won enough seats to form majority city councils. Five-party administrations also are expected to take over in scores of smaller cities.

Data Released on Korean 747 Flight

TOKYO (AP) — The pilot of the Korean Air Lines airliner shot down by a Soviet fighter in September 1983 missed Tokyo air control about his altitude during the last minutes before the attack that killed the 269 persons aboard, according to data released Wednesday by the Japanese government.

In a news conference, Yutaka Hata, a member of the upper house of the Diet from the ruling Liberal Democratic Party, said the data revealed that the pilot of the Boeing 747 had taken command and was not relying solely on an automatic pilot system during the last minutes.

The new document was issued in the name of Prime Minister Yasuhiro Nakasone and was delivered in reply to a formal query submitted by Mr. Hata last month. However, a research group led by Mr. Hata and Hideyuki Saya, a Socialist member of the upper house, did not offer possible reasons why the pilot would have given wrong information to air traffic controllers.

Swedish Teachers' Strike Is Ended

STOCKHOLM (Reuters) — The main public employees' union is calling off a 13-day strike by teachers on Wednesday but said that work stoppages by other civil servants would continue until wage demands were met.

Lars Backlin of the TCO-S union said the strike by some 6,000 teachers would end at midnight Wednesday, to relieve pressure on students and their parents. "We believe the teachers' strike has made its point," he said. About 23,000 teachers still will be affected by a lockdown imposed last weekend, unless employers respond to the union's gesture and allow schools to reopen.

The union's chief negotiator, Rune Larsson, said the union was eager to get negotiations started again. Swedish companies said Wednesday they would face serious problems if the strike, which has reduced the country's foreign trade to a trifle, was not settled soon. About 70,000 public-sector posts have been unoccupied because of the strike and retaliatory lockdown, which have halted air traffic and closed customs offices at all but a few ports.

China Paroles Lawyer Jailed as Spy

BEIJING (AP) — China said Wednesday it had paroled a Hong Kong-born, Harvard-trained lawyer jailed for spying two years ago in a case that focused attention on arbitrary arrests and secret detentions in the Chinese justice system.

The news agency Xinhua said that parole for Hans Huang, 34, was born in 1949 and bears the fingerprint of Dr. Mengel, according to an Associated Press report on an article in a Frankfurt news paper.

The Frankfurter Rundschau said U.S. and West German authorities searching for Dr. Mengel have obtained copies of the document, which is a temporary travel application issued in Genoa, Italy, to a Helmut Gregor and recently found in the archives of the Geneva-based International Red Cross.

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For the Record

In the city of Anuradhapura, Sri Lanka, 10 Tamils were killed and 11 homes set on fire in reprisals against an attack by Tamil separatists.

Guerrillas, police in Colombo said Wednesday. The death toll in the original attack on Tuesday rose to 145, they said. They also reported attacks on Tamil property at Puttalam on the west coast and Tissamaharama in the south.

Deputy Prime Minister Li Peng of China left Beijing for East Germany, Poland and Hungary on Wednesday. He is the highest-ranking Chinese official to visit the three East European countries in 20 years. (Reuters)

The death toll from *Leyomia's* disease in Stafford, England, rose to 37 on Wednesday, officials said. Six nurses contracted the disease but have recovered and returned to work. The disease is not contagious. (AP)

In Yugoslavia, Radovan Vlajkovic, 63, took over Wednesday as president of the country's collective state presidency, the highest government body, the news agency Tanjug announced. The presidency is a rotating position.

The leaders of two U.S. allies in Central America are to meet in Washington with President Ronald Reagan, it was announced Wednesday. President Jose Napoleón Duarte of El Salvador is due at the White House on Thursday, and President Roberto Suazo Córdova of Honduras is to visit Tuesday.

(AP, AP)

U.S. Industrial Output Falls

(Continued from Page 1)

that the economy might be reviving after a sluggish first quarter.

Retail sales, boosted by a rebound in demand for automobiles, rose to a seasonally adjusted total of \$112.2 billion in April after a 0.7 percent drop in consumer spending the month before, the Commerce Department said Tuesday.

But, in early May, domestic car sales fell 8.6 percent compared with the year-ago period, the seven major carmakers reported.

General Motors Corp.'s sales were down 12.9 percent and Ford Motor Co.'s sales were off 3.0 percent. Chrysler Corp. posted a gain of 3.8 percent.

The seasonally adjusted annual sales rate for the U.S. industry in the May 1-10 period was \$1.1 million, which is healthy but below the recent strong trend.

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U.S. Progresses on Laser Arms

(Continued from Page 1)

er than being reflected, bent or foreshortened by it.

However, in testimony last August before the House Republican Study Committee, Dr. Robert Jastrow, a physicist at Dartmouth University who is a proponent of the space-based missile system, said that way would be found to focus radiation. The X-ray laser, he said, "is one of the most promising possibilities for a defense against Soviet missiles."

Scientists familiar with the recent underground test say that the results, while generally positive, were in some cases ambiguous.

"It was a very good experiment," said one scientist, who requested anonymity. "Some parts worked well. Some didn't. But nothing was so good for Teller to be so euphoric." He referred to Edward Teller, a physicist at Livermore who played a central role in developing the hydrogen bomb and has vigorously promoted development of the nuclear weapons.

Although weapons experts in the national laboratories are eager to pursue X-ray laser research, some military officials in the Pentagon face substantial difficulties. The problems include treaties barring pre-deployment of the weapons in space, special time constraints on trying to get them quickly into space during a Soviet attack, and the damage that exploding nuclear weapons would inflict on nearby satellites.

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Published With The New York Times and The Washington Post

Carry On With SALT-2

In kinder times, there would be no question but that the United States would decide without much fuss to keep in force the terms of an old, admittedly imperfect arms control agreement while working on a new and supposedly better one. For the Reagan administration, however, it is a tough question whether to continue respecting the never ratified SALT-2 treaty, which the president at first pronounced "fatally flawed" but later reluctantly agreed not to undercut so long as Moscow did not undercut it either. The date at which the treaty would have expired is coming up, and even sooner the United States must decide whether to retire some old missiles in order to make room for new ones under the SALT-2 lid.

Within the administration a range of opinion is evident. Important figures on the political side continue to regard SALT-2 as a symbol of the failure of past arms control accords to do more to strengthen American security and as a damaging restraint on American arms-building programs. That the Soviets say they can still live with SALT-2 is taken as evidence that the restraints are not tough enough. It is suggested that breaking out of SALT-2, first from complicating the Geneva talks, would give Moscow added incentive to consider the proposals Washington is making there. Anyway, why should the United States honor an agreement when many questions about Soviet compliance are still hanging?

Elsewhere in the administration, including on its military side, there is another emphasis. There is, for instance, a disposition to believe that the Soviets are considerably better placed to deploy threatening new weapons than is the United States without SALT-2. To understand why, you need merely look at the bedraggled history of the MX. Military officials can identify no good military reason to go past the SALT limits. Diplomats worry how American allies would react to the spectacle of an American breakout. Many observers feel that Congress would react sharply to that spectacle by taking new budget hostages. The best cure for the flaws in past restraints and verification standards, many of these officials feel, is progress in Geneva — something arguably more likely to come in an atmosphere undisturbed by the detonation of SALT-2.

Liberal arms controllers argue that the very process of arms control is as important as the product — the agreements, which so far have turned out to be pretty thin. At this late date, however, no one can really think that President Reagan is going to change spots and adopt this sort of questionable reasoning.

Nor is it necessary for him to do so. In his own administration, among people devoted to his conservative principles, there is comfortable support for continuing to observe the terms of SALT-2. He should do it.

— THE WASHINGTON POST.

Helms vs. Birth Control

Senator Jesse Helms and his supporters are continuing their fight to dismantle U.S. aid for birth control programs in developing countries. Senator Helms has attached a crippling amendment to the foreign aid bill now being considered on the Senate floor and may try to add even more destructive language.

Ostensibly the Helms amendment is intended only to prevent U.S. money from being used for coerced abortion and infanticide in China — alarming reports of such practices have been widely circulated — and this is an objective with which no one would quarrel. But the fact is that, under current law, no U.S. money now supports such activities either directly or indirectly. The Helms amendment is thus intended for its stated objective.

It is also dangerous. It would prevent any U.S. money from being used, either directly or indirectly, in any country that "permits, officially or in practice, infanticide or coerced abortion," or by any organization that gives any kind of direct or indirect aid to such country. Senator Helms states in a draft report that the language is deliberately "very broad" so that aid may be cut off not only to China but also to any other country in which the forbidden practices might be suspected, even if they were without official sanction.

Since infanticide is a tragic occurrence in nearly every country of the world, including

the United States, a vigorous application of the amendment obviously could serve to terminate all birth control aid. The most direct casualty of this amendment would be U.S. assistance to the useful and well-accepted United Nations birth control programs. The United Nations includes China among its aid recipients. However, contrary to recently published allegations, UN money is narrowly confined to stated purposes and no UN money has ever been used for abortion, whether voluntary or coerced, much less for infanticide.

Senators who are rightly concerned that U.S. money not be misused do not have to rely on birth control advocacy groups for this assurance. The Reagan administration's own Agency for International Development has repeatedly investigated UN programs and reaffirmed that they conform to long-standing U.S. policy against aiding even voluntary abortions. The most recent report, issued only two months ago, once again gave the United Nations a clean bill of health. Of course, the United States should use all its moral suasion to press for stronger action by the Chinese government against coercive practices. But senators should remember that voluntary family planning programs are the best-proven and most humane way to reduce resort to the age-old practices of abortion and infanticide.

— THE WASHINGTON POST.

Private Bank Insurance

Only a few weeks ago Ohio's privately insured savings and loan associations buckled under a wave of scandal and depositor panic. Now Maryland's privately insured thrift institutions are under severe strain due to large withdrawals of deposits. Two of these institutions have been taken over by the conservators of the insurance fund but others are in jeopardy and looking for federal help.

Nothing that has happened in Ohio or Maryland puts federally insured bank deposits at risk. But the federal government's concern is certainly justified. The two crises suggest that private insurance offers inadequate protection to depositors and poses a threat to America's national banking system.

Congress should insist that privately insured thrifts switch to federal insurance or, if they cannot qualify, close up shop.

In Maryland — and also in Massachusetts, Pennsylvania, North Carolina and Ohio — state-chartered savings and loans have been able to avoid tighter federal regulation of lending and higher federal insurance premiums by joining private insurance pools. When two such Maryland thrifts were about to default on obligations last week, the insurer stepped in.

The Maryland Savings Share Insurance Corporation could probably have covered the losses of the two, but if others also get into deeper trouble the fund might run short. If that should happen, the Maryland Legislature would have to decide whether to make good on the insurance fund's unpaid debts or leave depositors to lose some of their money. Surely

the state bears some responsibility to depositors who had reason to believe that state regulators would protect them.

That is not, however, the end of the matter, as uneasiness in North Carolina shows. The line between a state's private insurance system and federally insured systems elsewhere is not a reliable barrier against losses of confidence.

When Ohio's private system went belly up, deposits in nearby federally insured Ohio banks were sophisticated enough to understand that their money remained safe. But the Ohio crisis triggered an abrupt decline in the value of the dollar overseas. How foreigners — or Americans — would react to more bad news from Maryland is not known. But a world financial system already buffeted by explosive movements of capital would surely be better off if it avoided gratuitous strains.

The prudent course would be for Congress to set a timetable for ending all private deposit insurance systems. Even federal insurance is no panacea. Many federally insured savings and loan institutions are in weak financial condition — and getting weaker. Regulatory reforms to prevent their managers from betting the store on speculative loans and investments are overdue.

But federally insured thrifts, however serious their problems, at least have the benefit of Congress's determination — and capacity — to guarantee their deposits. That cannot be said for deposits in the still privately insured offshoots of the thrift industry.

— THE NEW YORK TIMES.

FROM OUR MAY 16 PAGES, 75 AND 50 YEARS AGO

1910: A Leader Soon in South Africa

JOHANNESBURG — The situation here on the eve of Lord Gladstone's arrival is most interesting. Every colonial Premier is on the way to Cape Town, where they will meet the new Governor-General of South Africa [on May 17]. Lord Gladstone will also meet Lord Selborne, high commissioner for South Africa, and will hold consultations with him in order to familiarize himself with the situation. Mr. John X. Merriman, as the oldest politician in the oldest colony in South Africa, Cape Colony, would in the ordinary course be constitutionally chosen Premier of United South Africa, but the whole country, with the exception of the Orange River Colony and the western portion of Cape Colony, favors the appointment of General Louis Botha on account of the latter's youth and striking personality.

1935: European Trade Talks Begin

BRUSSELS — Fresh attempts to promote the economic unity of Europe were launched when the European Economic Congress opened its three-day session here [on May 15]. Among the delegates are the former Belgian Premier, George Theuns, and M. Pierre Forthomme, who negotiated the Belgium-United States trade agreement. M. Paul Hyman, Belgian Foreign Minister, delivered the opening speech. Most delegates approve of Aristide Briand's proposal in 1930 for a "pan-European customs union," but owing to the present political difficulties it is expected that the congress will content itself with urging that the advanced ground seized by the League of Nations committee of experts in September, 1931, and lost in the subsequent outbreak of national tariffs and quotas, be again attempted.

JAMES ROSENSTEIN.



The CIA in Beirut: Less Than Extreme Caution

By Joseph Kraft

WASHINGTON — The latest front-page appearance of the CIA provides one more piece of irrefutable evidence that the United States should engage in ambitious covert operations only with the utmost caution.

Even if the agency were absolutely first-class in such matters, which it is not, the nature of American society makes exposure of failure practically certain. When that occurs, Americans become subject to retaliation and a precious resource of national security, the whole intelligence community, gets a black eye.

Terrorism in Lebanon provides the background to the most recent fiasco. As that country began to disintegrate in factional warfare last year, Americans on the spot became increasingly subject to violent incidents, ranging from threats through kidnapping to car bomb attacks on the U.S. Embassy and the marine headquarters in Beirut. Several top officials — including Secretary of State George Shultz, CIA Director William Casey and National Security Adviser Robert McFarlane — came to the conclusion the United States should develop, if only to protect its agents, a covert capacity to penetrate and pre-empt action by anti-American terrorist organizations.

At the end of 1984 Mr. Reagan signed the order authorizing such action. His decision was cleared with the chairman and vice chairman of the House and Senate intelligence committees. With those mandates, the CIA began to develop a covert counterintelligence capability in cooperation with the intelligence arm of the government of President Amin Gemayel. But the Lebanese regime is a more a factor among factions than a central government.

After receiving American training in counterterrorism, Lebanese intelligence agents went into business for themselves. On March 8 they tried to wipe out Mohammed Hussein Fadallah.

Second-guessing failure is nearly as odious as

trying to shift the blame to others. But there are constants that run back from the Beirut incident through the mining of Nicaraguan harbors to many previous episodes. They provide a set of the given, the normal ingredients that have to be considered in planning any covert operations — the material for first-guessing.

For one thing, America is an open society. Government agencies constantly bicker with one another, taking their complaints to Congress and to the press and television. It is naive to the point of criminal stupidity to suppose that large-scale operations, if they do not succeed, can long be kept secret. Failure will out.

Second, working with foreign agents is particularly tricky. They have their own agendas. They usually have scores to settle with various parties in their own country. Some of their targets are not necessarily the targets of American foreign policy. Foreigners working in the terrorist field especially tend to be flaky, and they are therefore doubly unreliable.

Third, the cost of publicized failure runs high. The intelligence community comes back into the public pillory. U.S. agents abroad become subject to retaliation. A major asset of foreign policy is weakened, if not paralyzed.

Extreme caution should be exercised before engaging in covert operations. But the Reagan administration has thrown caution to the winds. Except for the oversight committee of Congress, it has practically wiped out institutional checks on dubious intelligence business. It has converted the president's Foreign Intelligence Advisory Board into a haven for right-wingers. And it has maintained at the helm of Central Intelligence a figure who combines insensitivity to ethical questions with a gung-ho spirit when it comes to clandestine operations of the most extensive kind — William Casey.

Los Angeles Times Syndicate

his writing. This seems to me to be a key observation, lost in too much of the discussion that writers and professors have among themselves about commitment, political engagement and their role in the public world.

They in fact possess no special political qualifications. When the intellectual takes up a political role, he does so on the politician's terms, not his own. A political party or movement may be able to use him as propagandist, analyst or tactician but it cannot use him as poet, scholar or novelist without subverting the art or scholarship. There is dreary evidence of

The argument has been made that Marxism itself is really the means by which the intellectual revolutionary puts down his rival, the working-class rebel.

this in all the "committed" but largely worthless literature produced on party lines by Communists and Fascists since the 1920s. Even the people who more recently have turned themselves into propagandists for liberal (or neo-conservative) governments — whether under the auspices of government agencies or of committees for present and future dangers and the like — have all paid some cost in damage to their real work. It can be asked if anything has been gained in proportion to what was lost. Propaganda converts first the propagandist, and he or she is sometimes the principal convert.

Those who become advisers to presidents more often than not find themselves turned into ornaments or instruments. It was flattering to John Kennedy to have Arthur Schlesinger Jr. as court historian, but Professor Schlesinger's advice on such matters as whether or not to invade Cuba was ignored. Henry Kissinger, by career a political analyst, nonetheless did what Richard Nixon decided. One may reasonably ask if much would have been changed had either stayed at Harvard.

The artist or scholar is too often drawn to political action because he lacks confidence in the authority of his trade. He is looking for a cure to his sense of exclusion, obscurity, frustration. When the intellectual says "I must give myself to the people" he is often saying, "I want the people (or the revolution, the government) to give themselves to me, to be led (or advised) by me, giving me the eminence and power my work has failed to provide."

This argument has been made that Marxism itself is really the means by which the intellectual revolutionary puts down his rival for power, the working-class rebel. Marxism says that revolution is a science. You have to be an educated person to understand it, so as to be able to tell the workers what to do.

Power and fame are the spurs, more often than altruism — which is exactly the same as for the politician himself, except that he is more likely to know what he is doing, and what he cannot do, in his hard trade. Intellectuals like to apply abstractions to living society, with the occasional unfortunate consequence such as the Gulag, Pol Pot's killing fields, the camps, the famines produced by improving agricultural techniques in backward societies.

In the end, nonetheless, the politician is nearly always applying someone else's ideas — the innocent slave, as Keynes said, of some long-dead economist or philosopher. The intellectual wins in the end. There is no joy in this for the economist or philosopher, who would have preferred the Nobel Prize and rich consultancies while alive; but it is probably safer that way. The cobbler to his last.

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LETTERS: 'The heart of the matter is not war guilt but Nazi guilt'

The Seeds of Anti-Semitism

The heart of the matter is not war guilt but Nazi guilt. The Nazi horrors were not accidents or by-products of the war, but the systematic realization of a declared program. Without denying national responsibility, we of course reject the racist notion of a "guilty nation." But differentiation between Nazism and the German nation demands a clear break with the Nazi past. The Bitburg military

memorial is a symbol of the reconciliation that is vital to European and Western unity. I write this despite the fact that my country, Belgium, suffered gravely from the war.

JOHN DAY.

Paris

Who remembers the eight martyred hamlets south of Florence where 581 innocents were slaughtered by members of the Hermann Göring Division in the spring of 1944? Or the hundreds of other communities in the West and the thousands in Eastern Europe and the Soviet Union which suffered the same fate at the hands of Wehrmacht units?

JOHN DAY.

Paris

As an American Jew living in Germany, I am all too aware of the seeds of Nazism buried in the guilt of this great country. The weed is dead but the seeds remain.

MARC ARONOFF.

Munich

In 1984 I voted for Ronald Reagan. His insistence upon visiting the Bitburg military cemetery has left me incredulous.

BARUCH J. HURWICH.

Jerusalem

I was awakened the other day at 4 A.M. by an anonymous telephone call: "Filthy Jew, you deserve to die. Jew bastard, into the oven," and so on. Perhaps some felt embarrassed, embodied, absolved by a presidential blessing. While stressing "never again" and the need to remember, President Reagan may have conveyed by his very presence at Bitburg that what happened was not so bad after all, that it is all right now, thus encouraging not remembrance but forgetfulness.

JAMES ROSENSTEIN.

Puraria

At Dachau, when asked for her reaction to Mr. Reagan's visit, Simone Veil, a survivor of Auschwitz, said: "California is a long way from the real world." (She did not say, as reported, "a long way from Europe.")

MARISA SELFERT.

Augsburg, West Germany

On May 5 in Bitburg, police at the barricade on the main street, when asked why they were halting authorized demonstrators, replied that they were merely obeying orders.

DAVID SHINAR.

Amsterdam, Netherlands

Europe has a long history of having to fight against Germans, with all the suffering that entails. A lingering feeling remains that there is a streak of bellicosity in the German people that could return again.

CYNTHIA COLE.

Monaco

Students the world over, including Germans, are militant about what pertains them. Do German students agitate for less ambiguous penalties against convicted war criminals?

GIGI PERKINSON.

Toulouse

Born in Berlin in 1931 as the son of a Prussian Jew who fought as an officer in the German army during World War I and whose very existence as a German citizen was de-

stroyed by the Nazis, I consider that the manner in which President Reagan's recent visit to my country has been commented upon by the American press in general and by your newspaper in particular shameful.

ROBERT A. HAGAN, S.J.

Rome

While the Bitburg controversy raged, I read that the Canadian writer Farley Mowat had been barred from entering the United States, apparently because he wrote a book portraying the Soviets in a friendly light. As a Canadian I am beginning to wonder just what sort of values prevail south of our border.

SIMON FOWLER.

Marbella, Spain

Flora Lewis, in "Bitburg, 1985: The Damage Is Done, a Lesson Remains" (April 27), cited Ryszard Kapuscinski's reference to history as a river consisting of deep and narrow currents and of surface flows that appear and disappear. But she does not convincingly discern the deep currents in discussing

Unfortunately, the deep currents involved

consist of atrocities throughout history, which manifest themselves on the surface, only to submerge and re-emerge in endlessly varying forms. The enormous Nazi atrocities remain within view in the adult memory of still active people. Nevertheless, as surface manifestations of historical atrocities they are downstream of us, and the view upstream is dim.

Other atrocities have since surfaced — terrorism, boat people, Cambodian genocide.

SCIENCE

Michigan Inventor's Device Helps Eyes Speak for Paralyzed

By Jane Leavy

WASHINGTON Post Service
EAST LANSING, Michigan — Her name is Blanche. She lies in bed, as she has since the fall of 1978. She waits for her husband who has not come in two years, for her children who sometimes visit on holidays, for someone to change the television channel.

Today she waits for Martin King, the inventor of a computerized eye-monitoring system that gives voice to people who have no other way to speak.

Mr. King lives a life of chips and diodes, input and output, modems and programs. He is exhilarated by high-speed CMOS integrated circuits, enthralled by EPROMs. He is the new American hero: the computer-nerd-cum-inventor.

"Invention is not how to do something but the perception of need," he said. Blanche's need is clear. Six and a half years ago she entered a hospital for minor back surgery and left a quadriplegic. She can feel but she cannot move, except to nod. She can smile but cannot tell you why.

Her main communication aid is a 4-by-6-inch (10-by-15-centimeter) card crayoned in primary colors, with the letters of the alphabet aligned under the numerals 1 through 5. Mr. King reads the numbers and letters aloud. Blanche nods when he reaches the right one.

"One, two, three, four, five," he says. "One, two, three, four, five."

Blanche nods at a four, then an L, then a T and an H, until slowly, inexorably, she says, "I think of old men being inventors."

Mr. King, who is 35, kneels by her side, holding her hand. He is tall, about 6 foot. Kneeling, he can look into her eyes, which is not so much a nicely as a necessity. Blanche says people who know her can read her eyes. Mr. King's device, the Eyescan Communicator, can read her eyes and translate their position into written speech.

Blanche has been testing the device for Mr. King since December. The first time they used it, she broke her glasses. Today they will buy new ones.

Will Mr. King's machine make a

significant difference in Blanche's life?

"Yes," said Blanche, who agreed to be interviewed as long as she was not further identified. "I like to run my mouth all the time."

Mr. King sighed. "You're going to make this funny, aren't you?" he said.

The question was posed again: Will it make a significant difference in her life?

She looked at him, but his head was buried in his hands.

"The bottom line is, 'Who gives a damn while I'm lying here?'" Mr. King said. "Blanche won't tell you that. So I will. Isn't that so that?"

She nodded vehemently and smiled.

"One, two, three, four, five," Mr. King said. "One, two, three, four, five."

"Let's go get the glasses," Blanche said.

Mary Brady, assistive-device specialist at Pennsylvania Special Education Resource Center, calls Mr. King "typical of the crazy inventor type."

Will Mr. King's machine make a

"I hate that tag, because of all the things it denotes," Mr. King said: "The eccentric guy in the back yard, not directed at reality, a little crazy. You get a picture of Charles Goodyear, who ran around in his rubber clothes for 10 years and tried to convince people rubber was a great thing." He added, later: "I hate it, probably because it's too accurate."

The Eyescan prototype, which has been on the market since December, is a stationary device that requires the user to sit motionless in front of it. But Mark Friedman, who developed the Eyescan for Sentient Systems Technology Inc. with students from Carnegie-Mellon University, said the company would market a head-mounted device in the fall.

The Eyescan prototype is a pair of black-framed glasses, the right lens fixed with a cylindrical device about the size and shape of a salt shaker. The eye sees a multicolored display composed of seven hexagons, the letters of the alphabet divided among them and grouped around centered dots. In order to produce an A, the eye fixes on the letter, which is blue, and then on the hexagon with the blue dot. An A appears on the screen.

Although it is slower than a direct gaze mechanism, which requires the eye to fix on only one character, it is also more reliable. Mr. King expects users to be able to produce at least 50 characters a minute.

Research in the area is not new. The military has been increasingly interested in hand-free control, using the eye and the head to operate devices in the environment of the cockpit," said Mary Brady at the Pennsylvania research center. She supervised a Defense Department project involving the development of an electromagnetic head-track-

ing device for aircraft pilots.

At the same time, rehabilitation researchers have been interested in eye control," she said, "because with most disabled people it's the last site of bodily control. When everything else goes, what they have left is control of the eye."

The essence of the invention is a sensor ring within the cylinder, composed of six infrared light-emitting diodes, which are solid-state light sources like tiny light bulbs, and six photo-transistors that have the ability to sense the light being reflected back from the eye," Mr. King said. "We turn on one of those light bulbs at a time and we look at the reflected intensi-

ty at various positions around that ring. You can imagine if I shine a flashlight in your eye and watch how much light is reflected back, that the light will vary depending on where you are looking from. This change is what we use to measure eye position. The computer processes the reflection."

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Mr. King is working at the Cornell High Energy Synchrotron Source laboratory where he read the book about the Mafia don. His former boss there, Professor Boris Bautz, said: "I think Martin is as close to a genius as I've ever come across. Also, he's crazy. He really is. His mind bubbles more than he can handle."

IT WAS Eyescan that enabled Michael Ryan, a 6-year-old boy who became a paraplegic because of medical malpractice, to convince insurance companies that, as Mr. King put it, "he was capable of an intact intelligence and thus capable of using a communication device and that he needed more money than just life support, he needed money to support a technology to give him an education."

The insurance companies agreed to a settlement that guarantees Michael a minimum of \$26 million over the course of his life.

Questions about the device remain. "The questions I have are the visual fatigue, the difficulty calibrating and the cosmetic problem of having a big blob hanging in front of your eye," Mary Brady said.

Eventually, Mr. King said, the user should be able to memorize the display and remove the cylinder from the glasses, leaving only the sensor ring. Patterson made a large plastic display for Blanche so she could begin to memorize the positions of the letters.

One night three years ago he read a novel about the retired don of a Mafia family. "He had a stroke and the only thing he could do is move his eyes," Mr. King said. "I thought, this is really stupid. I could help this guy communicate with a computer that monitors where his eyes are looking while he is looking at a display of characters."

He quit his job and founded Eyescan Inc., gambling that he could find a way to make his idea work. He put \$50,000, all of his savings, into the company. An equal amount has been invested by his mother, his girlfriend, Ritchie Patterson; and his brother, Hugo, the president of Eyescan.

Last fall he became an adjunct specialist at Michigan State University, working with Dr. John Elenberg, director of the Artificial Language Laboratory. He works 16 to 20 hours a day. Some nights he never leaves the office. Sometimes he struggles with depression.

"It's my life," he said. "I'm 100 percent into it. This is not at all like work to me. It's a toyland in a certain sense. Going home to sleep is actually a distraction."

For Blanche, Eyescan means a visitor, a touch of the hand. "What she doesn't realize is how the machine will put her in contact with people," Mr. King said. "She hasn't seen that yet."

The device — if it works — will allow her to make phone calls and receive mail, to shop, perhaps to hold a job. Mr. King hopes she will be able to do these things by September, which is when he expects to have Eyescan on the market. He hopes to sell it for less than \$2,000, one-fourth the price of the Eyesetter, the only other comparable device available.

Companies in Australia, the Netherlands and Canada, as well as the United States, are working on eye-monitoring systems. Dr. Elenberg has estimated that a million people worldwide could use a device like Eyescan. Mr. King said there were 20,000 to 50,000 people in the United States for whom eye communication would be the only appropriate technology.

The population with that particular disability is increasing enormously," says Virginia Stern of the American Association for the Ad-

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"It's my life," he said. "I'm 100 percent into it. This is not at all like work to me. It's a toyland in a certain sense. Going home to sleep is actually a distraction."

For Blanche, Eyescan means a visitor, a touch of the hand. "What she doesn't realize is how the machine will put her in contact with people," Mr. King said. "She hasn't seen that yet."

The device — if it works — will allow her to make phone calls and receive mail, to shop, perhaps to hold a job. Mr. King hopes she will be able to do these things by September, which is when he expects to have Eyescan on the market. He hopes to sell it for less than \$2,000, one-fourth the price of the Eyesetter, the only other comparable device available.

Companies in Australia, the Netherlands and Canada, as well as the United States, are working on eye-monitoring systems. Dr. Elenberg has estimated that a million people worldwide could use a device like Eyescan. Mr. King said there were 20,000 to 50,000 people in the United States for whom eye communication would be the only appropriate technology.

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UNITED ARAB EMIRATES

A SPECIAL ECONOMIC REPORT

THURSDAY, MAY 16, 1985

Page 7

Historical Developments Provide The Key to Strongest Bond

By Frank Heard-Bey

ABU DHABI — The United Arab Emirates is a small country by any standard, with just over 1.2 million inhabitants. In order to appreciate why this apparently fragile federation holds together, it is rewarding to focus on the seven small political units that constitute this federation.

The seven emirates are not neatly balanced districts, created for administrative purposes. They are political entities that predate the foundation of the federation in December 1971. Each has its own identity rooted in history. The oil revenues of three of the seven emirates have turned some areas of the U.A.E. into cosmopolitan urban centers, while other parts of the country have changed comparatively little over the last two decades.

The historical developments that were responsible for making these seven political entities so very different in size of population and area, however, also provide the strongest common bond between them.

Until recently territorial borders did not matter in this corner of the world; what mattered were people. Being herdsmen, pearl-divers, date-growers or traders, they worked mostly within the economic framework of the extended family or the subtribe. They were politically bound together by recognizing the leader of one tribal group as their representative in disputes with other tribes and as mediator and highest legal authority in domestic disputes.

A tribal sheikh attained his position only partly belonging to the family that had traditionally provided the leader. He also had to excel in the virtues expected of him — personal courage, sense of justice, generosity. The history of the seven emirates is full of incidents where entire tribes withdrew their loyalty and attached themselves to

another, particularly charismatic sheikh. His standing was thus greatly enhanced, having acquired not only many more fighting men, but also access to more of the precious few places of economic value, such as oases, natural harbors, markets or grazing areas.

Thus successive sheikhs of a small but energetic clan of maritime trading Arabs, the Qawasim, managed during the 18th and 19th centuries to attract as their followers almost all the tribes living in the areas now belonging to the emirates of Ras al-Khaimah, Sharjah and Fujairah. Their descendants failed to maintain a grip on these tribes, which live on the coast of the Gulf, the coast of the Indian Ocean or in the most inaccessible valleys of a barren mountain range. Early in the 19th century the core of the Qawasim "realm" split up into two parts, Ras al-Khaimah and Sharjah, both ruled by different branches of the Qawasim. On the east coast, the tribal leader of the large Sharqiya in

Map adapted from "From Trucial States to United Emirates," by Frank Heard-Bey, courtesy of Longman Group Ltd.

tribe finally managed to shake off Qasimi domination in 1952, when Fujairah formally became the seventh Trucial State.

In Abu Dhabi successive sheikhs of the Al Bu Falah, a subtribe of the confederation of Bani Yas tribes, have retained the undisputed leadership of all the tribes living in the sandy desert and along the coast of what is now the territory of the emirate of Abu Dhabi. But in 1833 another subtribe of the Bani Yas, the Al Bu Falash, succeeded from Abu Dhabi and joined other Bani Yas tribesmen in the fishing settlement of Dubai, a move that very soon led to the establishment of the sheikhdom of Dubai under the descendants of Maktum bin Buti, who died in 1852.

Tribal politics and the personal standing of leading sheikhs have been eclipsed by a new political dimension.

Since the state of Abu Dhabi is host to the U.A.E.'s capital of the same name, the ever-present question is: Where does the emirate end and the federal state begin? The simplified answer is that it begins at the purse strings. Having promoted with singleminded dedication the formation of the federal state and having been twice re-elected only president, the Ruler of Abu Dhabi lived up to expectation. In the initial years he committed *unlimited funds from Abu Dhabi* for developing and running the entire federation.

This generosity, which stands in the tradition of a successful tribal sheikh, was linked to one condition: to progressively solidify the newly created federation. In a multitude of aspects this has certainly been successful. Backed by Abu Dhabi's funds and an army of bureaucrats, most federal ministries extended their operations into the

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The London-based Iraq Petroleum Co., an international consortium, obtained concessions in all the then Trucial States from 1938 onwards. As soon as it began exploring for oil in 1946 the delineation of the boundaries of the concessions became all important. Henceforth, politics was no longer only a matter of the loyalty of tribal people, but of possession of square miles of desert with the potential of oil-bearing rock beneath.

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A SPECIAL REPORT ON THE U.A.E.

Economic Squeeze Quickens Pace of Mergers in Banking

By Stephen Tinacwell

LONDON — Early last year talk of mergers and takeovers dominated banking circles in the United Arab Emirates following the collapse of Union Bank of the Middle East. With oil revenues at little more than half the 1980 peak of \$13.6 billion the economy of the federation has changed significantly but the banking sector, which had ballooned during the boom, had not responded to the squeeze.

Bankers readily acknowledged that the country was overbanked and that a country of 1.2 million people did not need over 50 banks. The Central Bank, too, had no doubts about its objective. The governor, Abdul Malik al-Hamad, said on numerous occasions that "we want fewer banks, better quality banks and stronger banks." The question, however, was how to achieve this aim when the banks were often linked inextricably to family, tribal and emirate ties and a lot more was at stake than just bank assets.

The political and social dimensions of the merger issue have been compounded by the Central Bank's relative inability to enforce certain requirements, but this is changing. As one Dubai banker put it: "You can't have a shotgun marriage in this society, force will not work here. The shareholders simply have to come to grips with the problem."

This year, either through gentle persuasion or the realities of a recession-hit economy, the merger

concept has gained momentum and three bank mergers have taken place over the last four months. In the latest, during April, Abu Dhabi's three commercial banks — Federal Commercial Bank, Khaleej Commercial Bank and Emirates Commercial Bank — combined to form the emirate's second largest bank, the Commercial Bank of Abu Dhabi, with a paid-up capital of \$340 million and assets of nearly \$1.9 billion.

The much-rumored merger of the three commercial banks follows the takeover in January of the small Dubai-based Emirates National Bank by Union Bank of the Middle East, which is now 73-percent owned by the Dubai government. One of the ironies of the changing face of Emirates banking is that UBME is now one of the vehicles for implementing the government strategy; less than two years ago the Dubai government had intervened to prop up the bank when its principal shareholders were Abdul Wahab Galzari's two brothers, Abdul Latif and Abdul Rahim.

In both takeovers the respective banks had run into serious liquidity problems and had major loan portfolio difficulties. UBME is believed to have paid \$400,000 for the Dubai Bank shares but details of the arrangements for both deals are unclear and complicated by the government involvement.

In Abu Dhabi, the local government is expected to inject around \$327 million of new funds into the

new bank's capital and reserves and to provide for the three banks' bad loans. Under the plan the government will take a 60-percent stake in Commercial Bank of Abu Dhabi and the remaining shares divided between the three banks.

The pattern that has emerged this year is that the government or government-owned bank provides the necessary cash injection to make stronger banking units. This seems the only possibility since almost all the prospective merger candidates suffer from the same problems of bad loan portfolios, inadequate liquidity and weak management. A mere merger would only compound the problems.

The Central Bank has been slowly tightening up the system. With the introduction of new regulatory measures in January on bad loans and presentation of balance sheets the structural problems in many of the smaller banks are becoming more evident.

As the economy is unlikely to provide any bonuses or a turnaround for the banks, their deteriorating performance, especially in relation to loans, is expected to lead the smaller institutions into mergers with the bigger state-controlled banks. For many, including some of the 29 foreign banks, a justifiable rationale or market strategy no longer exists, but it seems clear that the authorities are anxious to avoid the outright collapse of even the smallest institution.

While Abu Dhabi and Dubai, with their long established source

Military Necessity Is Forcing Closer Cooperation

By Robert Bailey

LONDON — The spillover risks from the long-running war between Iran and Iraq have been highlighted by the growing number of attacks on ships in the Gulf by both belligerents in the last 12 months. The atmosphere of Emirates has given greater legitimacy to the United Arab Emirates' heavy military spending of the last few years.

However, such expenditure has proved to be of limited value in building up a viable deterrent to aggression.

The compromises inherent in the fragile makeup of the U.A.E. are reflected in federal policies toward defense questions. On one hand, the dominance and concern of Saudi Arabia to establish a coordinated effort through its leadership of the Gulf Cooperation Council is recognized by the participation of the Abu Dhabi armed forces in the GCC's Peninsula Shield military exercises.

On the other hand, both historical and longer-term considerations are recognized by the maintenance of full

diplomatic relations with Tehran. Most cooperation between the U.A.E. and Iran ended with the fall of the shah and the individual emirates have only small, though concentrated, Shiite Moslem minorities, comprising not much more than 6 or 7 percent of the population.

However, Dubai, despite the Iranian revolution and the war, has maintained a healthy re-export trade with Iran, while Sharjah remains dependent for its oil wealth on Iranian cooperation.

Relations with both its major neighbors in the region, Saudi Arabia and Iran, have been complicated by rivalries among the individual emirates themselves since independence, particularly between Abu Dhabi and Dubai. An example of this occurred in 1978, when the U.A.E. president, Sheikh Zayed bin Sultan al-Nahayan of Abu Dhabi, named his son, Colonel Sultan bin Zayed, as commander in chief of the president's armed forces without consulting either the federal prime minister, Sheikh Rashid bin Said al-Maktoom, the ruler of Dubai, or Sheikh Rashid's

son, Sheikh Mohammed bin Rashid al-Maktoom, the defense minister.

The appointment led to a temporary withdrawal of Dubai's forces from the joint U.A.E. command.

But although the old-style family rivalries are never likely to go away entirely, lower oil revenues and the need to acquire increasingly sophisticated defense systems, as well as the threat from Iran, are forcing greater cooperation in security matters.

The U.A.E.'s complicated, expensive and still elusive search for security started after Britain ended its military role in the Gulf in 1971. Since then, the U.A.E. has maintained one of the highest per-capita defense expenditures in the world. The 1984 budget allocation was \$2.5 billion (dinars \$1.86 billion) for a country with a population of 1.2 million, half of whom are foreign workers.

The foreign element is evident in the federation's 43,000-man armed forces, which has a high proportion of recruits from Baluchistan as well as Pakistan, Jordan and British contracted officers.

Construction Projects Favor Local Contractors

By Toby Odome

LONDON — The United Arab Emirates has maintained its position as the fifth or sixth largest construction market in the Middle East since 1980. But with the exception of the defense sector most of the contracts awarded tend to be small.

Abu Dhabi, traditionally the richest and the biggest spender of the seven emirates, typified the move away from the large projects of the late 1970s and early 1980s to the smaller projects that are of greater interest to local companies than to the international set.

While Abu Dhabi and Dubai, with their long established source

of revenues from their oil, have slowed down their development programs, Sharjah has taken off and is using the revenues from the Seiwa gas and condensate field to develop a long-term industrial base. The other four northern emirates — Ras al-Khaimah, Fujairah, Umm al-Qurwain and Ajman — are less fortunate and rely heavily on funding from their wealthier partners in federation.

Payment delays and wrangling over emirate contributions continue to plague federal funding. In December 1984 President Sheikh Zayed bin Sultan al-Nahayan set up a committee comprising senior members of the Federal National Council, the appointed parliament, to prepare a "comprehensive economic plan" to deal with the problems caused by falling oil revenues. The committee had not published its report by the end of April.

Payment delays have become so pressing that in the first six months of 1984 about \$500 million was allocated to paying off contractors mainly in the defense sector. A special committee was set up to oversee this but very little of the money has actually been dispersed, contractors say. While some of the more pressing problems of the federal system may be resolved by Sheikh Zayed's committee the more deep-seated problem of the whole federal structure is likely to linger.

"As federal minister, I do not have control over what the other emirates do — only over Abu Dhabi," was the way the minister of petroleum and mineral resources, Mana Said al-Oteiba, summed up the problem in an interview with the Nicisus-based oil weekly Middle East Economic Survey. "Our manifestation of this is the U.A.E.'s failure to comply with the reductions in production called for by the Organization of Petroleum Exporting Countries at Geneva.

Payment delays and wrangling over emirate contributions continue to plague federal funding.

in October 1984. The Emirates

has rarely dropped below producing 1.1 million barrels a day of oil

bars a day.

For contractors and consultants alike it is the individual emirate budgets and plans that provide the truest reflection of business activity. Abu Dhabi's budget has not been published as this report went to press but all the indications are that it will be much the same as 1984.

But in Abu Dhabi the larger projects tend to make news these days only when they are postponed or

cancelled. In 1984 Abu Dhabi allocated \$3.9 billion for spending. But the major projects expected to go to tender did not. These were: the Hodary, Sadiyat and Magra bridges with a combined value of about \$300 million and the \$35-million conference center, which has been bid twice.

But one project that is set to go

ahead is the \$100-million construction of hardened shelters at the Dhafra air base. The low bidder for the job is a joint venture of Italy's

Beattini Constructions and West Germany's Coutinho, Cas & Co. The concrete shelters will provide protection for the 18 Mirage 2000s on order from France's Avions Marcel Dassault-Breguet Aviation.

The Emirates Telecommunications Corp. (Etisalat) is expected to award design contracts for two new buildings in Abu Dhabi and Dubai during the year. The overall project is managed by Bechtel Corp. of the United States.

Another U.S. company, De Leuw Cather International, is supervising the 8.9-billion-dinar transport and road improvement program, which had provided substantial work for both local and international contractors over the last three or four years.

Apart from the three bridges most of the big jobs have been completed but there are expected

to be contracts this year for several road widening jobs in the city.

The oil sector is still a major source of work. The U.S. giants, Bechtel and Fluor Corp. have managed to monopolize most of the project management side of the programs. But tenders should be going out and awards made for several jobs for offshore enhanced recovery, surface oil-gathering and gas-development projects. The proposed oil pipeline between Abu Dhabi and Fujairah is not considered a commercial venture but may emerge as a Gulf Co-operation Council project, depending on how the war between Iran and Iraq progresses.

With its oil revenues apparently unaffected by OPEC quotas, Dubai continues to improve its infrastructure. In August 1984, South Korea's Keung Nam Enterprises was awarded a \$230-million contract for a sewerage treatment plant and pipeline network.

And after three years of negotiations over the price a contract to draw up a master plan for the emirate was awarded to Greece's Doxides Associates. France's Sogear was also asked to do a hydrological study for the emirate. Both parts of the work are expected to be completed in two years and should provide ample opportunities in the coming years.

To keep up with the expected growth in activity a second terminal is being built at Dubai airport by the local Delta in joint venture with the U.K.'s Balfour Beatty. The \$30-million contract was awarded in August 1984.

A Political Federation

(Continued From Previous Page)

to find oil. It also has rock, which is both used locally and exported to other Gulf States.

Al-Jaiman has developed its shipbuilding tradition, and it benefits from its geographical proximity to Sharjah and Dubai, offering relatively cheaper housing to expatriate employees who work in these emirates.

Therefore, competition between the seven emirates is vigorous, with local authorities keen to explore a multitude of avenues to enhance the economic prospects in their respective states. While there was some experimenting with identical and sometimes uneconomical projects in the 1970s, most local authorities now concentrate on seeing how they can best take advantage of their own particular geographical conditions and natural resources.

Fujairah has quite naturally developed agriculture and fishing along with some small-scale manufacturing and a good new harbor. The emirate could become the U.A.E.'s safe oil-export terminal in the Indian Ocean.

Ras al-Khaimah is a major market garden of the Emirates, and strenuous efforts have been made

Umm al-Qurwain remains a fishing community. Sharjah exports offshore oil and onshore gas liquids. It is making great efforts to become the spiritual center of the U.A.E. always in the forefront with educational projects, exhibitions, book fairs, conference centers, theatrical competitions and a very outspoken press.

In other ways, however, the inevitable administrative and political centralization in — and, hence, domination by — the capital is anathema to a group of political entities in which each ruler sees himself as the one who has to shape the destiny of his state and of those people whose loyalty he wants to retain.

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H.H. Shaikh Sultan Bin Mohamed Al Qassim

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Dubai Dry Dock Adds to the Port's Efficiency

By Phillip Hastings

DUBAI — Despite new port development throughout the United Arab Emirates over the last decade, Dubai is still the major shipping center and general entrepot not only for the Emirates but for the Gulf as a whole.

Key factors in Dubai's continuing success in shipping are the emirate's two major seaports, now backed up by the large although still underused Dubai Dry Dock complex with its facilities for ship repair.

The better-known of Dubai's two ports is Port Rashid, often simply referred to as Dubai Port. Originally planned as a four-berth deep-water harbor in the late 1960s, it was rapidly expanded into a 16-berth port as shipping demands increased.

A second-phase development, completed in 1979, created a further 20 berths, which included a modern five-berth container terminal, as well as 10 transhipment and several more open berths.

Altogether, the port now has 36 berths, giving a total berth length of more than 7 kilometers (4.3 miles), and a range of covered cargo sheds and hard-surfaced yards. Equipment includes five gantry cranes, straddle carriers, roll on/roll off tractors, terminal tractors and a large number of forklift trucks.

Central to Port Rashid's good reputation as a fast and efficient handler of both the U.A.E. and Gulf transhipment cargo traffic is a well-established computer system covering the container terminal operations. Basically, the system records all container movements from discharge to loading and vice versa, as well as providing statistical information and billing services.

Data is entered into the system through terminal equipment located in the container control office and connected directly to the central computer. Similarly, information held in the computer can be extracted and displayed on the terminals at any time.

Moreover, Dubai's reputation as an entrepot has made it an obvious choice as the focal point for sea and air activities, which generally involve goods being shipped from the Indian subcontinent and the Far

Overall, Port Rashid has to date stood up fairly well to the general fluctuating fortunes of Gulf economies over the last couple of years. Total cargo throughput reached 5.4 million tons in 1982 and 6 million tons in 1983, before dropping back to about 5 million tons last year.

Further transhipment business could result from Gulf Air's intention to expand its Far East operations. At the moment the carrier serves Hong Kong, Manila and Bangkok but it already has its eyes on Singapore and Seoul as future

East to the Gulf and then air-freighted to Europe and other destinations.

Sea-air traffic has only really started to develop as a significant business over the last couple of years as international airlines, in particular, have looked for ways to counter the prevailing one-way nature of the Middle East air freight industry. Return traffic out of the region is even now predominantly still limited to personal effects and pieces of equipment being sent for repair.

Gulf Air leads in this development. The airline, although headquartered in Bahrain, has concentrated its sea-air operations on Dubai. In addition to sea-air business, it is also developing all-air traffic in a similar way.

Other airlines too, are building up their Dubai transhipment business as a means of generating much-needed freight traffic out of the Gulf. British Airways has been looking to develop more sea-air and all-air transhipment freight business through Dubai and Bahrain, the obvious choices for such activities.

"For transhipment in the Gulf there really is nowhere to compare with Dubai; here you have a very flexible port management so you can, for instance, undertake transhipping operations in the port for traffic going on to Saudi Arabia, Kuwait and other Gulf points," one Dubai-based executive said.

Integral Foreign Participation Buoys Oil Output

ABU DHABI — Oil production in the United Arab Emirates is unique in the Gulf in the integral involvement of foreign oil companies. They operate under a wide range of agreements in which government participation as well as foreign shareholding varies.

When all other OPEC countries were moving toward full takeover, Sheikh Zayed bin Sultan al-Nahayan of Abu Dhabi decided to halt Abu Dhabi's participation at 60 percent, a policy that has been followed in the other emirates. The U.A.E. benefits from access to the technical expertise and marketing experience of the oil companies. They, in turn, benefit from access to crude, as well as downstream opportunities. Profit margins for the companies are often low but in the long term, they say, the investment will be worth it.

Long-standing foreign shareholders in Abu Dhabi's oil (40 percent of the two main onshore and offshore concessions), Shell, Mobil, Exxon and Patarei (Gulfcoast). There are also a number of more recent Japanese arrivals involved in the development of smaller fields and also minority partners (12 percent) with the Abu Dhabi National Oil Co. in the giant upper Zakum offshore project.

During 1983-84 the relatively high price of Abu Dhabi's light (39 API) Murban crude led to two problems, namely the theory issue of differential — a wider OPEC issue — and that of margins: the profit per barrel allowed to the shareholders as a return on their investment. Last year Abu Dhabi's crude was consistently overpriced relative to its value on the open market. Disposing of it was increasingly difficult, and in November the government temporarily increased the margins provided the shareholders lifted their full entitlements. In January this year OPEC eased the differential problem, bringing down the price of Murban to \$28.15 and in February fresh margins were agreed, slightly lower than November's.

Abu Dhabi still has problems selling its crude, as the minister of petroleum, Mansi al-Oteiba, pointed out recently. Most of it goes to Japan, supplies partly from the shareholders but principally from ADNOC's 60-percent share of production. This is strictly tied to the official price, which sometimes makes it difficult to move. The result has been temporary cuts in crude production even below the OPEC ceiling. Offshore production cannot be cut further below a minimum limit because associated gas is needed for the LNG plant on Das Island.

Japanese customers have been turning to cheaper sources, notably Oman, which is not a member of OPEC. Their contracted purchases of Abu Dhabi crude are now down to 90,000 barrels per day for this

year, compared with 205,000 barrels in 1982 and there has been some hard bargaining for concessions on payment terms. ADNOC's officials are holding their own, but most recently the Japanese suggested they should pay in yen rather than in dollars.

There have been several offshore gas finds over the last year and development of the Khuff field is going ahead to reinject 250 million cubic feet a day into the Uweinat formation. Uweinat cap gas is now providing at least half the needs of the country — a geological breakthrough using rapidly evolving seismic techniques that has attracted a host of foreign oil companies of all sizes.

The discoveries include Dubai's Marga field, a concession owned by Arco and British, which has been producing about 25,000 barrels a day of condensate since early last year and reinjecting the gas. Sharjah's Sajaa field now produces about 60,000 barrels a day of condensate and is flaring 400 million cubic feet a day of gas, having sold only about 100 million cubic feet a day for a remarkably high price to Emirates General Petroleum Co. for power generation in the northern emirates.

There is also Ras al-Khaimah's offshore Salih field, now producing about 13,000 barrels a day, flaring some of the gas and piping some condensate for cement kilns. In Abu Dhabi, Amoco is exploring a

continuation of the Margha-Sajaa structure; its first well found noncommercial quantities of gas condensate and is now drilling a second.

There is little new downstream activity in the Emirates despite rumors. Sharjah has gone ahead with its \$300-million LPG plant in partnership with Amoco and the Japanese but the proposed fertilizer plant has founded on the price of the feedstock, Sajaa gas, which foreign investors reckon is too high.

Oil observers criticize Sharjah's flaring but in present market conditions the government's hesitancy is understandable. Agreements reported to have been reached with Dubai for purchase of Sharjah gas for power generation; Dubai needs the gas, and anything would be better than Sharjah flaring it. But, relations between the two emirates are still clouded by their border dispute, which also affects delineation of their respective oil fields.

The uncertainty of federal authority as a whole is most clearly demonstrated in oil matters. The

minister of petroleum, Mr. al-Oteiba, has the inescapable task of combining the roles of chairing the OPEC production monitoring committee, heading the federal ministry and also Abu Dhabi's Department of Petroleum.

Dubai does not feel bound by the ministry, and Abu Dhabi has, therefore, had to bear the brunt of cuts in OPEC production quotas. Dubai's offshore production (from rapidly declining reserves) is at least 360,000 barrels a day and the Dubai government refuses to be bound by OPEC decisions on the grounds that it produces less than Abu Dhabi anyway. Condensate production is not included in OPEC's quotas.

There is no sign that Federal National Council pressure on the authorities to rationalize and re-activate the economy on a federal basis is likely to make any impression on each emirate's determination to preserve independent control of hydrocarbon resources and their development.

— SARAH SEARIGHT

'Greening of Desert' May Dry Up Water Reserves

ABU DHABI — The drive from Abu Dhabi to the fast-expanding oasis of Al-Ain is hot and exhausting. Two-thirds of the way there is an unexpected oasis, great bushes of boughs and fibrous and deep shade. From there to Al-Ain, on both sides of the road, is a continuous belt of saplings. Al-Ain itself, once a string of date gardens with small patches of cultivation, is now surrounded by an ever-growing belt of farmland.

Gardens, forests and farms are a remarkable achievement here, the result of wealth, determination and copious irrigation; it is known as "greening the desert." But Abu Dhabians are now seriously questioning the implications of such uncontrollable use of water.

Most of the new greenery is agricultural, farms growing vegetables and fodder. The growth in the

number and size of farms has mostly occurred in the Al-Ain area, inspired by Abu Dhabi's ruler, Sheikh Zayed bin Sultan al-Nahayan. New areas are fenced in every week. Another well-developed area is around Daisi, in Sharjah, and there has been considerable expansion of the traditional agricultural base in Ras al-Khaimah, best watered of the emirates.

Farms vary from large government projects to private holdings, experimental plots and a few joint ventures with foreign concerns. A farmer is well subsidized by the Ministry of Agriculture, in the case of Ras al-Khaimah, or the local Department of Agriculture in Al-Ain.

Irrigation methods vary, but are becoming more economic with the installation of drip, bubble and sprinkler systems.

Al-Ain, Daisi and much of Ras al-Khaimah are on a wide gravel plain between the sand of the desert and the mountains that run parallel to the southern coast of Arabia. Beneath this plain is an extensive shallow aquifer fed by rainwater from the mountains. Rainfall in the United Arab Emirates is erratic, averaging 6 to 10 centimeters a year (2.36 to 3.9 inches). About 72 percent of this is lost through evaporation and about 14 percent drains directly into the sea.

Ninety percent of the U.A.E.'s consumption of water is used for agriculture. In Abu Dhabi city, all water is desalinated, with some recycled water used on municipal gardens. A pipeline has been laid between Abu Dhabi and Al-Ain capable of sending up to 20 million gallons (75.7 million liters) a day of water from the Taweeb power

plants and desalination plant when the installation is complete; at present, about 2 million gallons is being sent.

Dubai city is switching to desalination because of the depleted ground water resources.

Local critics are concerned that agriculture is drawing too lavishly on finite water resources. At a recent seminar on sweet-water resources at Al-Ain University, Sheikh Nahyan bin Mubarak, president of the university, said that at present rates of consumption, ground-water resources in Al-Ain would be exhausted in 10 to 11 years.

The issue is highly political.

Reports by one group of experts on limited resources gather dust while other experts report unlimited resources.

Oil companies are contributing data on deep aquifers but they are the first to point out that brackishness increases with depth (although this can be filtered out to some extent) and that there are some limitations to deep resources as to shallow.

No one disputes the achievement of the United Arab Emirates in feeding a population that has grown so quickly, both in heads and appetites, over the last 10 years. But further development demands further imports of qualified manpower, which in turn needs to be fed. When rainfall is as small as the U.A.E.'s, all resources are limited.

— SARAH SEARIGHT

CONTRIBUTORS

ROBERT BAILEY is the special reports editor of the London-based Middle East Economic Digest.

PHILLIP HASTINGS is a journalist based in Britain who specializes in the transportation industry.

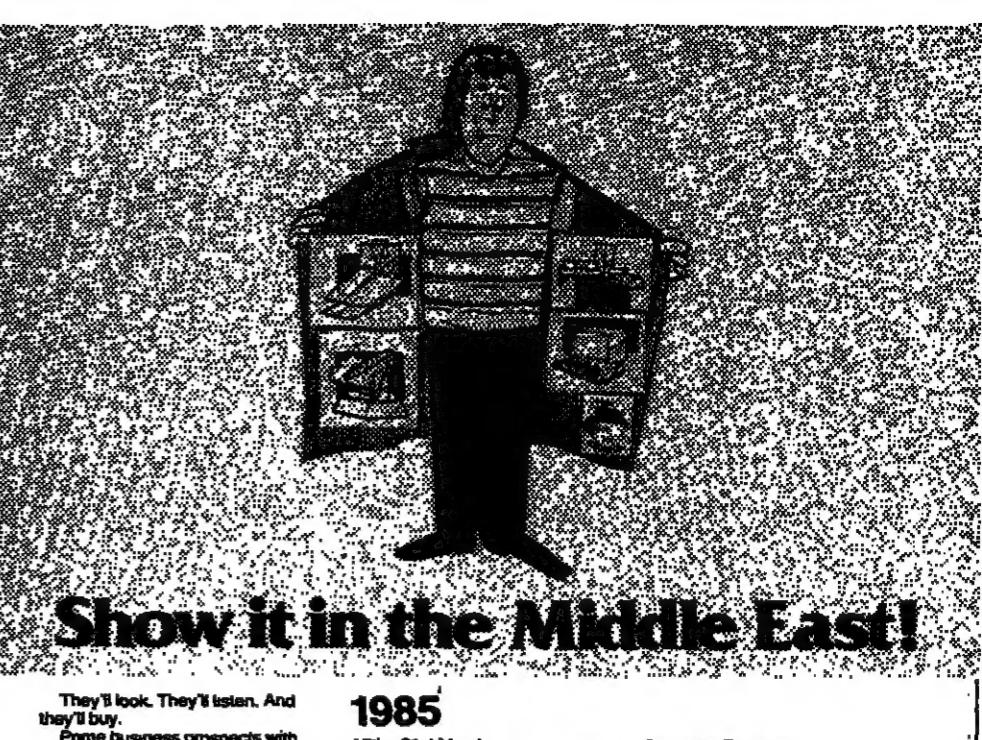
FRAUKE HEARD-HEY, a member of the Center for Documentation and Research in Abu Dhabi, researches and frequently writes about the Gulf and Arabian Peninsula for English, French

and German publications. She is the author of "From Trucial States to United Arab Emirates" (Longman, 1982).

TOBY ODONE is a staff writer for the Middle East Economic Digest.

SARAH SEARIGHT is a London-based journalist who writes about Middle-Eastern affairs.

STEPHEN TIMEWELL is a staff financial writer for the Middle East Economic Digest.



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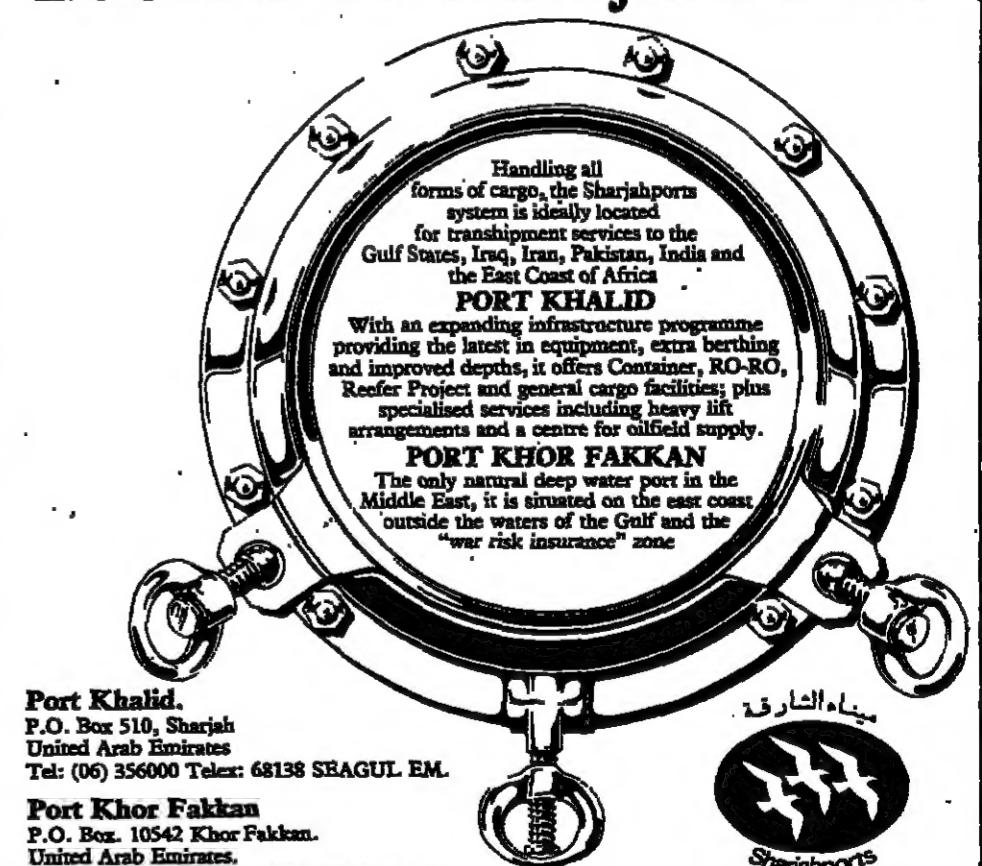
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THURSDAY, MAY 16, 1985

WALL STREET WATCH

Men's Long Skirts in Vogue As Investors Turn Bearish

By EDWARD ROHRBACH

International Herald Tribune

PARIS — Men's skirts are "all the rage in New York," according to a newspaper item cited by Edward S. Hyman Jr., of Cyrus J. Lawrence Inc., called "Wall Street's favorite economist." He comments: "That has to be bearish for the stock market," since a photo accompanying the article shows a sheepish, bespectacled man who is wearing a long skirt and is about to step out into traffic.

Mr. Hyman's whimsical point, of course, is that the relationship between rising hemlines on women's skirts and rising stock prices has long been recognized — so men wearing long skirts has to be too much even for Wall Street to bear.

While the fashion world may be questioning America's and the stock market's manliness, Stan Weinstein, editor and publisher of the Professional Tape Reader, evokes the traditional macho image in his latest commentary:

"Like a prizefighter, feigning with his right hand and then jabbing with his left, this market is bobbing and weaving and totally confusing the street. More and more investors are throwing in the towel and becoming bearish as the market whipsaws back and forth."

But that is giving up too early, he believes, because the Dow-Jones Industrial Average is "overstating the market's weakness" and there is "sub-surface strengthening taking place."

YET Mr. Weinstein, who relies solely on technical analysis, is more sure of Wall Street's favorable trend over the distance than he is about the next few rounds. For one thing, he does not like the way General Motors' has been

This contention that investors are getting tired of taking punishment on Wall Street is reflected in the latest "decision-makers" poll conducted by Richard B. Hoey, economist at Drexel Burnham.

Between February of this year and April "optimism about the stock market declined abruptly," he disclosed, according to responses from 106 big institutional investors such as banks and pension funds. He calculates his Institutional Sentiment Stock Index by subtracting from the percentage of investment managers expecting to be in a bull market in three months the percentage of a bear market.

In February of this year and April "optimism about the stock market reached the highest level of the 1984-85 period at 45.1 percent, as 36.1 percent of the those surveyed believed that the stock market would be in a bull market in three months, with only 11 percent expecting to be in a bear market by May. But two months later, optimism had waned as the index dropped 38.5 percentage points to 6.6 percent, the lowest level in the 1984-85 period.

Describing the index as a "useful intermediate-term contrary opinion indicator," Mr. Hoey added, "Thus, we take the erosion of the extreme optimism of February as an encouraging sign for the stock market."

The firm's director of research, Burton M. Siegel, put it this way: "Consensus expectations have plummeted in recent weeks and, now they incorporate most of the disappointing news. Positive surprises have become more likely."

Noting that the key assumption behind Drexel Burnham's market optimism is the sustainability of the economic cycle, Mr. Siegel continued: "The recession and growth recession scenarios that are attracting great interest are likely to recede as favorable economic data are reported later this spring and summer. The negative company earnings surprises and the adjustments in

(Continued on Page 13, Col. 3)

Currency Rates

Late Interbank rates on May 15, excluding fees.											
Official fixings for Amsterdam, Brussels, Frankfurt, Milan, Paris, New York rates of		S. D.M.		F.F.		I.L.		G.M.		S.P.	
2 P.M.	S	U.S.	D.M.	F.F.	I.L.	G.M.	S.P.	I.P.	Yen	S.P.	Yen
Amsterdam	3.478	4.288	123.59	27.07	0.7771	5.987	5.047	124.19	104.25	1.0000	104.25
Brussels	0.158	0.158	1.0000	0.277	1.245 X	0.851	0.846	1.1874	1.2207	1.0000	1.2207
Frankfurt	3.495	4.305	123.59	27.07	0.7771	5.987	5.047	124.19	104.25	1.0000	104.25
Milan	1.362	1.362	1.0000	1.2225	2.6725	4.387	7.738	3.2575	21.50	1.0000	21.50
Paris	1.9453	2.0700	1.0000	2.0700	2.0700	2.052	3.724	7.604	7.635	1.0000	7.635
New York (a)	—	0.7971	0.8644	0.8644	0.8644	0.8644	0.8644	0.8644	0.8644	1.0000	0.8644
Paris	250.775	272.62	83.98	24.88	12.06	7.244	47.48	97.46	1.0000	1.0000	1.0000
Zurich	2.575	2.550	1.0000	2.5401	4.8207	1.4292	2.5701	46.9565	1.0000	1.0000	1.0000
1 S.C.U.	0.2882	0.2882	0.2882	0.2882	0.2882	0.2882	0.2882	0.2882	0.2882	1.0000	0.2882
1 S.D.M.	0.992827	0.992827	0.992827	0.992827	0.992827	0.992827	0.992827	0.992827	0.992827	1.0000	0.992827

Dollar Values

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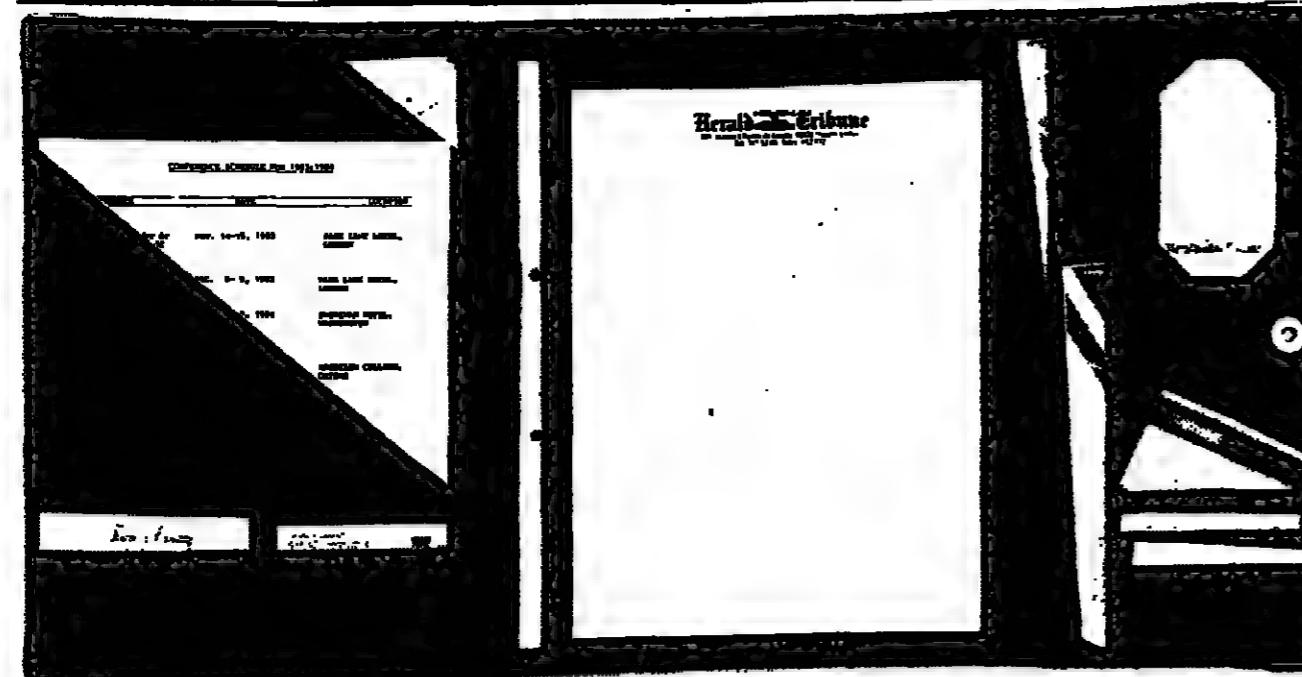
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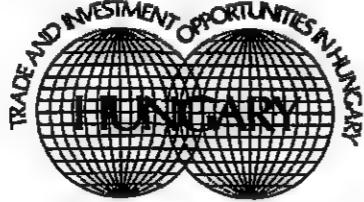
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JUNE 13

Keynote Address:

Mr. József Marci, Deputy Prime Minister

The Economic Outlook:

Professor József Bognár, Director, Institute of World Economics of the Hungarian Academy of Sciences

Foreign Trade:

Mr. István Török, Secretary of State for Foreign Trade

The Five Year Plan:

Dr. János Hóds, Secretary of State, National Planning Board

Afternoon Address:

Dr. Armand Hammer, Chairman and Chief Executive Officer, Occidental Petroleum Corporation

Investment Incentives and Tax Free Zones:

Dr. Péter Medgyessy, Deputy Minister of Finance

Banking:

Mr. Sándor Demcsák, General Manager, Hungarian Foreign Trading Bank

JUNE 14

The Banking System:

Mr. János Feleki, First Deputy President, National Bank of Hungary

Western Banking and Hungary:

Mr. Gabriel Eichler, Vice President and General Manager, Bank of America N.Y., Vienna

Industrial Outlook:

Mr. Ferenc Horváth, Secretary of State for Industry

Panel of Hungarian Industrialists:

Afternoon Address:

Professor Richard Portes, Director, Centre for Economic Policy Research, London

Joint Ventures:

Mr. László Békefi, Director General, Department for International Monetary Affairs, Ministry of Finance

Panel of Foreign Companies:

Moderator: Mr. Tamás Beck, President, Hungarian Chamber of Commerce

REGISTRATION INFORMATION

The conference will be held at the Amw Hotel, Budapest, on June 13 and 14. A block of rooms has been reserved for participants at preferred rates. For details, please contact the hotel directly.

Amw Hotel, Mr. T. Tóth, Registered No. 2

Budapest 105, Tel: (36 1) 187834, Telex: 22 40540.

The fee for the conference is \$650 or the equivalent in a convertible currency. This includes dinner June 13, cocktails, lunches, documentation and translation, Hungarian-to-French-German translation fees, plus payable in advance of the conference and will be returned in full for any cancellation postmarked on or before May 31. Cancellations after that date will be charged the full fee.

The conference was organized in association with Interpress in Budapest and G. Arnold Testing B.V. in Amsterdam.

Molnár, The Hungarian office, is the official agency for the conference.

REGISTRATION FORM

Mr. _____ Mrs. _____ Dr. _____ Other _____

